



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,791	12/06/2001	Matti Lehtimäki	915.407	9904

4955 7590 11/15/2005

WARE FRESSOLA VAN DER SLUYS &
ADOLPHSON, LLP
BRADFORD GREEN BUILDING 5
755 MAIN STREET, P O BOX 224
MONROE, CT 06468

EXAMINER

LEVITAN, DMITRY

ART UNIT	PAPER NUMBER
----------	--------------

2662

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

(X)

Office Action Summary	Application No. 10/006,791	Applicant(s) LEHTIMAKI ET AL.	
	Examiner Dmitry Levitan	Art Unit 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Amendment, filed 10/26/05, has been entered. Claims 1-9 and 11-28 remain pending.

Claim Objections

1. Claims 3, 4, 6 and 27 are objected to because of the following informalities:

Claims 3 and 4 limitations are identical, making the claims duplicates.

Claim 6 limitation "audio and/or video data" is unclear, because it is not understood if the meaning of the claim is audio and video data or audio or video data.

Claim 27 recites the limitation "the core network" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim 28 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 27 limitations (as amended) comprise the conversion function as claimed in dependent claim 28.

Claim Rejections - 35 USC § 112

2. In light of Applicant's amendment, the claim rejections under 35 USC § 112 set in the previous Office action have been withdrawn.

Claim Rejections - 35 USC § 103

1. Claims 1-9, 11-14, 19, 21-25, 27 and 28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien (US 6,389,008).

1. Regarding claims 1-4, 11, 21-23, 27 and 28, Lupien teaches a network, a method and gateway comprising:

A telecommunication network (integrated network on Fig. 2 and 14:46-62) having at least one radio access network (cellular network ANSI-41 on Fig. 1 and 2, 14:28-45), a core network (packet data network 34 on Fig. 2 and 14:63-15:2), and at least one terminal device (inherently part of cellular network 26 on Fig. 2),

Wherein said core network comprises at least one gateway device (SGSN 32 and GGSN 33 on Fig. 2 and 14:64-15:10), and at least one network control device (equipment identity register EIR 36 on Fig. 2 and 15:5-10, wherein EIR identifies valid mobile equipment to prevent use of lost and stolen equipment) adapted to control said at least one gateway device by transmitting a control information to the gateway device (inherently part of the system, because authorization of the mobile equipment is essential for the system operation),

Wherein said radio access network is directly connected to the gateway device via a first interface (interface between SGSN 32 and items shown in box 38: GPRS-VLR 37 and IW GPRS-BSC 39 shown on Fig. 2 and 15:21-30),

Wherein a second interface is connected between the access network control device and the gateway device, the control information being transmitted from the access network control device and the gateway device via said second interface (Interface Gf between SGSN 32 and EIR 36 on Fig. 2); and

Art Unit: 2662

Wherein said telecommunication network is adapted to route user data directly, without being transmitted through the network control device, between said radio access network and said at least one gateway device via said first interface (routing data through SGSN and GGSN to the packet data network 34 as shown on Fig. 2 and 14:67-15:4), and

Wherein the conversion between audio signals carried on telephone circuits and data packets carried over the Internet or other packet networks is provided (providing conversion between audio signals of cellular network ANSI-41 and data packets to be carried over packet data network 34, as shown on Fig. 2 and 2:63-3:4).

Lupien does not teach to perform conversion between audio signals carried on telephone circuits and data packets carried over Internet at the gateway.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform conversion between audio signals carried on telephone circuits and data packets carried over Internet at the gateway, to reduce cost of the system by collocating the conversion unit with the gateway.

In addition regarding claims 21-23, Lupien teaches using network control device /EIR to identify valid mobile equipment to prevent use of lost and stolen equipment, wherein mobile equipment inherently transmits control information to EIR for authorization including user's data through the first interface, connecting the access radio network to the gateway.

In addition regarding claim 27, Lupien teaches using EIR to identify valid mobile equipment to prevent use of lost and stolen equipment, wherein the gateway is inherently receiving the control information from EIR.

Art Unit: 2662

2. Regarding claims 5 and 6, Lupien teaches user data as real-time speech and audio (cellular based telephones, wherein data is real-time speech/voice 2:5-10).

3. Regarding claims 12 and 13, Lupien teaches the packet network as an ATM and IP network (ATM and IP networks 1:30-50).

4. Regarding claim 7, Lupien teaches all the limitations of parent claims 1, 5 and 6. Lupien does not teach using RTP protocol.

Official notice is taken that RTP protocol is well known and used for real time speech transmission.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using RTP protocol to the system of Lupien improve the system compatibility with devices using popular RTP protocol.

5. Regarding claims 8, 9, 14, 24 and 25, Lupien teaches all the limitations of parent claims 1 and 21.

Lupien does not teach using ISUP, MGCP or TDM protocols for second interface.

Official notice is taken that ISUP, TDM and MGCP protocols are well known and used for transmitting data in telecommunication networks.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using ISUP, TDM or MGCP protocols to the system of Lupien to improve the system compatibility with devices using popular ISUP, TDM or MGCP protocols.

6. Regarding claim 19, Lupien teaches all the limitations of parent claim 1.

Lupien does not teach using access network control unit being part of a Mobile Switching Center.

Art Unit: 2662

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add access network control unit to a Mobile Switching Center to reduce cost of the system by collocating access network control unit with a Mobile Switching Center.

7. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of Zheng (US 5,745,477).

Lupien teaches all the limitations of parent claim 1, including packet networks as ATM and IP.

Lupien does not teach using packet networks for transmitting control information.

Zheng teaches using packet or ATM networks for transmitting control information (using RM cells to transmit control information 2:1-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using packet networks for transmitting control information of Zheng to the system of Lupien to utilize well known control delivery method to make the system compatible with numerous available ATM and IP devices.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of Admitted prior art.

Lupien teaches all the limitations of parent claim 1.

Lupien does not teach telecommunication network as UMTS network.

Admitted prior art teaches telecommunication network as UMTS network (Specification, Background of the invention, 2:3-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add new UMTS telecommunication network standard of Admitted prior art to the system of Lupien to utilize new features of well known standard.

Art Unit: 2662

9. Claims 20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of UMTS 23.01 V 1.0.0 (1998-09) standard.

Lupien teaches all the limitations of parent claim 1.

Lupien does not teach using Iu as the first interface.

UMTS standard teaches using Iu interface between access and core network domains (Iu interface, shown on Fig. 1 and page 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add Iu interface of UMTS telecommunication network standard to the system of Lupien to utilize new features of well known standard and make the system compatible with other UMTS devices.

Response to Arguments

10. Applicant's arguments filed 10/26/05 have been fully considered but they are not persuasive.

On page 7 of the Response, Applicant argues that the teaching of Lupien is different from the claimed invention.

Examiner respectfully disagrees.

Applicant's arguments regarding the differences between the Lupien teaching and the invention are irrelevant because they are not directed to the claims.

On page 7 of the Response, Applicant argues that EIR of Lupien is not a gateway device.

Examiner respectfully disagrees.

Art Unit: 2662

EIR of Lupien is referred in the rejection of the claims as a network control device, connected to the gateway, and the network control device was not claimed as a gateway.

On page 7 of the Response, Applicant argues that GPRS-BSC of Lupien is not a gateway device.

Examiner respectfully disagrees.

GPRS-BSC of Lupien is referred in the rejection of the claims as a portion of the gateway interfacing two networks: ANSI-41 and Packet data network 34, shown on Fig. 2. According to the disclosure on page 4:5-15 network interconnecting devices are called gateways, therefore GPRS-BSC belongs to the gateway.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dmitry Levitan
Patent Examiner.
11/07/05



JOHN PEZZLO
PRIMARY EXAMINER